POLYCHROME HOUSE NO. ONE
9900 Colesville Road (U.S. Route 29)
Silver Spring
Montgomery County
Maryland

HABS No. MD-1077

HARS MD 16-SILSPR 1-

PHOTOGRAPHS REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN BUILDINGS SURVEY
NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
P.O. BOX 37127
WASHINGTON, D.C. 20013-7127

ADDENDUM TO:
POLYCHROME HOUSE NO. 1
9900 Colesville Road (U.S. Route 29)
Silver Spring
Montgomery County
Maryland

HABS MD-1077 HABS MD,16-SILSPR,1-

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN BUILDINGS SURVEY

Addendum to **POLYCHROME HOUSE NO. 1**

HABS No. MD-1077

<u>Location</u>: 9900 Colesville Road, Silver Spring, Montgomery County,

Maryland.

Coordinates for the Polychrome House No. 1 are 39.018097 N, 77.015328 W. These were obtained through Google Earth in November 2010 and it is presumed with NAD1983. There is no restriction on the release of the locational data to the public.

<u>Present Owner:</u> Thomas H. and E.F. Bass.

<u>Present Use</u>: Dwelling house.

Significance: Polychrome House No. 1 was the first in a series of five such

houses clustered together in small subdivision a few miles from the district line. The polychrome houses represent a unique and artistic attempt at constructing prefabricated housing. They were constructed from concrete slabs ornamented by a process of colored concrete mosaic particular to the master craftsman, John Joseph Earley. Through his process of exposing the aggregate of various colors of crushed quartz and other rock forms in a mix of concrete, Earley was able to create structures possessing both innovation in their process of construction, and high artistic value.

John Joseph Earley was a nationally known master craftsman, and was considered a pioneer in the development of structural slab concrete. In 1934, after completing the multi-colored ceiling in the Department of Justice building, he was awarded the Turner gold medal of the American Concrete Institute for making concrete an "architectural medium" by developing methods for applying aggregates to add color and texture to the surface of concrete. Earley later served as President of the Institute. In 1936, he received the AIA medal for craftsmanship for his work on the Church of the Sacred Heart in Washington, DC. Although Earley's concrete mosaics appeared in approximately twenty Washington area buildings and in buildings in thirteen other cities nationwide, the polychrome houses were his first attempts at house construction.

From an engineering standpoint, the polychrome houses are significant as an example of new and innovative construction in the

form of pre-cast concrete panels. Much work was being attempted at the time to create housing with the use of concrete due to its ease of construction, cost economy, and insulating qualities. Earley's partner, and engineer, Basil G. Taylor devised a system of construction particular to the assembly of their pre-case concrete panels.

The polychrome houses are also significant historically. They are representative of a trend that took place during the depression of experimentation in the development of basic yet attractive housing that could be made both affordable and easily assembled through mass produced prefabrication. Thus they reflect the social and economic concerns of the period. The polychrome houses were assembled on site with pre-cast concrete panels made by the Earley Process Company in a studio in Rosslyn, Virginia, and trucked to the site.

Historian:

Catherine C. Lavoie, ca. 1990.

Research for this report by the author, and other prefabricated housing, was incorporated into the 1991 publication, *Yesterday's Houses of Tomorrow* (Washington, DC: Preservation Press). Subsequent to this publication, all the polychrome houses were listed as contributing properties to a historic district on the National Register of Historic Places.¹

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of erection: The first house, located at 9900 Colesville Road and known as "Polychrome [House] No. 1," was begun in 1934. According to a brief article that appeared in the (Washington) *Evening Star* on January 5, 1935, "The finishing touches are being put on the first house to be built with pre-cast panels of this process..." Work then proceeded on Polychrome No. 2 at 9904 Colesville Road. The later polychrome houses, on Sutherland Road (Nos. 9919, 9923, and 9925), were probably started in 1936 because the property was acquired in April of that year.

2. Architect: Although an architect himself, John Joseph Earley hired J.R. Kennedy to design the polychrome houses to specifications he provided. Basil G. Taylor was the project engineer.

¹ See Constance Perry, "Polychrome Historic District," Nomination 1996, National Register of Historic Places, National Park Service. (96000900).

- 3. Original and subsequent owners: Earley bought the property in 1934 and the present owners of Polychrome House No. 1 acquired it in 1981.²
- 4. Builders, suppliers: The polychrome houses, including No. 1, were assembled on site by Earley and his team. He and his partner, Basil G. Taylor, engineer, formed the Earley Process Corporation, chartered on January 5, 1935, in the District of Columbia, as the first house was being completed. John Joseph Earley, architect and inventor of this unique process, was president; Taylor was vice-president. Newspaperman and war correspondent Oswald Schuette served as secretary-treasurer. Their offices were located in the National Press Building and their studio was located at 2131 G Street, NW. The plant was in Rosslyn, Virginia. The concrete panels were cast in the plant and trucked out to the site for assembly.
- 5. Original plans and construction: No reference to original plans was found. However, a number of photographs of the polychrome houses under construction have been published.
- 6. Alterations and additions: The Polychrome House No. 1 appears to be in good, unaltered condition.

B. Historical Context

The polychrome houses were constructed at the height of the prefabrication movement. Largely a result of the depression, there was a general trend during the 1930s towards discovering through experimentation, ways of mass producing cheaper and better housing. This was coupled with the ongoing development and use of new, man-made building materials such as metal alloys, glass and concrete block, and so on, and the increased automation in the fabrication of building parts. The idea was that the success of the motor industry could be translated into the production of housing and that builders could therefore offer a superior house at lower prices, while also meeting increasing demands for housing. Thus, the movement was based partly on social consciousness and partly on a promise for a better, more innovative housing future.

Prefabricated housing research went on in commercial and industrial businesses through the work of privately funded foundations and within the federal government. Many of the various house types developed during this period were the product of subsidiaries of materials manufacturers and were therefore a ways by which they could increase the sale

² Montgomery County Land Records, Liber 578, folio 87, Fairway Land Company to John Joseph Earley, Deed, August 27, 1934; Montgomery County Land Records, Liber 5816, folio 619, John J. Kuhn [husband], John E. Kuhn [son], and Jacob Fridel, executors and personal representatives of the estate of Frances E. Kuhn to Thomas H. and Edith F. Bass, Deed, December 16, 1981.

POLYCHROME HOUSE No. 1 HABS No. MD-1077 (page 4)

of their raw material. Agencies of the federal government such as the Bureau of Standards, the Farm Security Administration and the Forest Products Laboratory provided much of the ground work for certain types of prefabrication as well as setting minimum standards and providing insured financing on home mortgages. Used mostly as temporary and war time housing, the federal government eventually became the primary consumer of prefab housing.

Although much experimentation went on and numerous prototypes and demonstration houses were constructed nationwide (many in the Washington metropolitan area due to the federal presence) most were unsuccessful as business ventures. This was due largely to the fact that success was predicted on large scale mass production in order to keep costs down and control quality. Thus a vicious cycle was created whereby production relied on demand and demand on the exposure created by mass production. Another problem was the stigma associated with a prefabricated house. Was a factory-made house a home? It conflicted with the desire for a home distinctive from your neighbors'. In addition, there was opposition from building trades labor and from architects who were fearful of the decreasing workload that could result.

As characteristic of the times, Earley's intent appears to have been largely humanitarian. As he himself stated his social philosophy, "the present social movement is a leveling one and it is entirely possible that we all will come to understand that the security which we desire for ourselves and our dependents lies in the nation's ability to provide food and shelter for everyone. It seems to me that the simplest way in which security can be achieved is to enable everyone to procure a small house and a plot of ground, which can be cultivated and which will provide sustenance." In terms of cost, Earley claimed that the total expenditure of his precast wall verses the sheathing, weather board, door and window frames, paint, etc., resulted in a slightly higher initial cost. However, because the precast walls required no maintenance, in the long run they would constitute a substantial savings. He also argued that his houses would not carry the prefab stigma. The precast moulds were subject to unlimited variations and that by changing the color and patterns of ornamentation a great degree of individuality could be achieved.

From a commercial standpoint, it appears that there was some intent to mass produce polychrome houses. According to a February 1935 interview which appeared in *Architectural Forum* magazine upon the completion of Polychrome House No. 1, he stated that although he had no immediate plans to erect whole communities of Earley houses, if financing was available he might experiment with a community of prefabricated houses in an effort to prove that mass production of units is as much the key to low cost housing as mass production of complete houses. It was also stated that the Earley Process Corporation was formed to handle a nationwide prefabrication business that they hoped would eventually result, and that the sculptor's studio in Rosslyn had been converted into a plant for producing the prefab panels.

Earley must have intended this small community of polychrome houses to be a pilot project for a nationwide business. Why Earley and his family never sold the houses to the

public is unknown, although a few other houses were built in the Washington area. Earley probably encountered the same difficulties as did other prefab manufacturers in selling his ideas to the public.

PART II. ARCHITECTURAL INFORMATION

A. General Statement

- 1. Architectural character: The polychrome houses exemplify Earley's unique form of architectural concrete. Through his process of exposing the natural colors of aggregate he created a new art form, concrete mosaic. The mosaic panels form decorative patterns such as the Art Deco style zigzag friezes, and the fluted columns and decorative panels that flank the windows and doors. The primary color used in the polychrome houses, pink, is derived from exposed aggregates of red jasperite, a form of quartz. The buff color is also derived from quartz and the blue from cobalt. Although the polychrome houses were prefabricated, the first two houses are very different from each other in design and detailing (it was not until later, when the three houses on Sutherland Road were built, that an attempt at standardization was made). Polychrome House No. 1 is a single story, rectangular-shaped structure with a front extending ell, causing the house to form crossing, low hipped roofs. Polychrome House No. 2 is more free flowing, but both have a modern almost exotic eastern look to them due to the interesting mosaic patterns.
- 2. Condition of fabric: Although built in 1934-36, the polychrome houses show no apparent signs of fading, thus retaining their brilliant pink, blue, red, black and buff colors.

B. Description³

Polychrome House No.1 was erected on concrete foundations and constructed using the Earley process⁴ of mosaic concrete, precast 2" thick panels (4' to 10' wide by 9' high) hung on a traditional wood frame and reinforced with concrete columns at each joint and by embedded steel dowels (1/4" diameter) placed along the vertical edges of the panels. Weather-proofing strips were placed between each panel, and the metal window and door

³ This section was synthesized by Virginia B. Price in 2011 from Perry's nomination (section 7, 2-3) and from Lavoie's initial description of the foundation, structure, and walls for the ca. 1990 HABS outline report.

⁴ The Earley Process refers to mosaic concrete made of crushed quartz and Portland cement that is then cast in moulds. The color and texture depends on the color and size of the aggregate. Just prior to hardening, the surface is wire brushed and the panel washed with a weak solution of muriatic acid to expose the aggregate. The panels are a standards size of two inches in thickness, nine feet in height and from four to ten feet in width and are reinforced with a steel mesh. The precast walls require no maintenance.

POLYCHROME HOUSE No. 1 HABS No. MD-1077 (page 6)

frames were out in place and then cast in the concrete panels. Highlighting the window openings is a blue panel, located below each portal. The main wall panels are pink-beige in hue, while the corner panels are buff. The corner panels were made to resemble fluted pilasters, and a zigzagging frieze in red and black wraps around the building. The front door, made of wood, also has three inset concrete panels that add further color to the entry. Colorful patterns extend out from the house with the details along the door sill and walkway edge. The house is covered by a hip roof with slate shingles.

Inside, Polychrome House No. 1 contains five rooms with just over 1000 square feet of living space and features more of the mosaic concrete, here a precast fireplace and mantel that extends to the ceiling and cobalt blue trim around the window openings. The blue was cast with the exterior panels, while the fireplace and mantelpiece are embellished with geometric patterns and fluted pilasters.

A detached garage is located south of the house; it was constructed at the same time and in the same way, with concrete mosaic panels, as the dwelling. It too has a hip roof covered with slate shingles.